

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,435	12/05/2005	Osamu Itatani	125433	2968
25944 OLIFF & BERI	7590 07/06/200 RIDGE, PLC	EXAMINER		
P.O. BOX 19928			PARKER, FREDERICK JOHN	
ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
			1762	
			MAIL DATE	DELIVERY MODE
			07/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/559,435	ITATANI ET AL.		
Office Action Summary	Examiner	Art Unit		
• .	Frederick J. Parker	1762		
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	ith the correspondence address		
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory perions - Failure to reply within the set or extended period for reply will, by state that the period for reply will be period	DATE OF THIS COMMUNION 1.136(a). In no event, however, may a round will apply and will expire SIX (6) MON tute, cause the application to become AE	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on 23 This action is FINAL . 2b) ☐ The 3) ☐ Since this application is in condition for allow closed in accordance with the practice under the practice under the practice.	nis action is non-final. vance except for formal matt	•		
Disposition of Claims				
4) Claim(s) 2-11 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) Claim(s) is/are allowed. 6) Claim(s) 2-11 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and	rawn from consideration.			
Application Papers				
9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	ccepted or b) objected to ne drawing(s) be held in abeyar ection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10-26-06.	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application		

Application/Control Number: 10/559,435

Art Unit: 1762

DETAILED ACTION

Response to Amendment

Claim Objections

The amendments in response to the Claim Objections of the Previous Office Action are acknowledged and appreciated, and the Examiner withdraws the objections.

Claim Rejections - 35 USC § 112

The amendments in response to the 35 USC 112 rejections of the Previous Office Action are acknowledged and appreciated, and the Examiner withdraws the rejections.

Claim Rejections - 35 USC § 102

The amendments in response to the 35 USC 102 rejections of the Previous Office Action are acknowledged and appreciated, and the Examiner withdraws the rejections. The new rejections below are necessitated by amendment.

Claim Rejections - 35 USC § 102

1. Claims 1-8,10,11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sagawa et al US 5505990.

Sagawa teaches a method of substrate articles in a container which is vibrated and stirred to contact the articles with media materials to apply adhesive and coating powder. The container as illustrated in various embodiments in figures 8-13 and accompanying text contains one or more substrate articles in the container which also contains impact media (col. 3, 57 to col. 4 8; etc), adhesive powder (col. 3, 30-45; etc), and a coating powder which may include inorganic particles (col. 6, 17-19;col. 8, 62+; EX. 5, etc). The media strike or impinge/ collide on the article to push adhesive onto the articles, and further press powder particles into the adhesive layer to cause bonding (col. 3, 57-66). The thickness of the adhesive layer, which may be formed by agitation (i.e. starting with little or no adhesive per claim 3) or prior to vibration/ stirring, is

Application/Control Number: 10/559,435

Art Unit: 1762

determined by the thickness of the coating to be formed, powder and media used per claim.

Adhesives may be cured or uncured resins (necessarily requiring a curing agent to carry out the method per claim 7) which may further comprise a volatile liquid (col. 5, 20-21) per claims 5-6.

"Spacer particles" per se are not mentioned. However, inorganic powder coating particles which controls coating thickness are taught (col. 5, 61-67), and a review of Applicants specification reveals that spacer particles as described in [0026,39] would not differentiate over the inorganic particles of the reference, and therefore would functionally serve the same purpose given the claim as written. Hence the reference meets the spacer particle limitations of claims 8 and 11.

Claim Rejections - 35 USC § 103

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sagawa et al US990 in view of Sagawa et al US 2001/0006733 (US733). Sagawa et al US990 is cited for the same reasons previously discussed, which are incorporated herein. An adhesive containing substantially no volatile material is cited.

Sagawa US990 teaches an analogous method of coating surfaces using impact media to apply adhesive and coating powder in a vibration/ collision method. In [0034] adhesives including one or two organic liquid mixing types (again, types requiring curing agents and both including epoxy, acrylic, polyester and other organic adhesives) and inorganic adhesives such as water glass (which would be free of volatile materials) are cited as equivalents. Since the concept of

Application/Control Number: 10/559,435

Art Unit: 1762

coating using collision forces by impact media during vibration/ stirring are the same and further an equivalence is established between the two references, it would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the method of Sagawa US990 by incorporating the inorganic adhesive which is substantially non-volatile of Sagawa US733 because it was established to be effective and equivalent to commonly used organic adhesives in similar impact coating methods.

Response to Arguments

Applicants arguments of the previous rejections are moot in view of the amended claims. The Examiner has withdrawn previous rejections and replaced them with the new rejections above which were necessitated by amendment.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1762

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frederick J. Parker Primary Examiner Art Unit 1762